

**+U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641**

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2004-183-EA

CASEFILE/PROJECT NUMBER (optional): COC-10179

PROJECT NAME: Evergreen 8 wells

<u>LEGAL DESCRIPTION:</u>	4C-1-4S-104	T4S R104W Sec1 Lot 4
	10C-12-4S-104	T4S R104W Sec 12 SWNE
	12C-12-4S-104	T4S R104W Sec12 SWNW
	2C-13-4S-104	T4S R104W Sec13 SWSE
	1C-23-4S-104	T4S R104W Sec23 SESE
	16C-24-4S-104	T4S R104W Sec 24 NENE
	2C-1-4S-104	T4S R104W Sec 1 Lot 2
	13C-14-4S-104	T4S R104W Sec 14 NWNW

APPLICANT: Evergreen Operating Corporation

ISSUES AND CONCERNS (optional): None

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action: Evergreen proposes to drill eight gas wells in the Evacuation Creek area. Some existing roads will be used. Four of the wells will be on the east side of Evacuation Creek and crossings will have to be upgraded for heavy truck traffic. Total disturbance will be about 23.13 acres.

4C-1-4S-104: the drill pad is in a large sage brush flat. We moved the access road to the toe of the slope on the west side of the valley. No trees will be impacted. If not required or built in connection with previously approved permits to drill, a locked gate should be required on the access road where it crosses Evacuation Creek. The access road (0.65 miles) and the drill pad will amount to about 3.48 acres of new disturbance.

10C-12-4S-104: location will be about 0.25 miles past the 7C-12-4S-104 location. This area is heavily wooded with pinion/juniper trees. The new access road and well pad will amount to

about 1.72 acres. If not required or built in connection with previously approved permits to drill, a locked gate should be required on the access road where it crosses Evacuation Creek.

12C-12-4S-104: 0.4 miles of new access road and drill pad will be about 1.57 acres of new disturbance. This area is heavily wooded with pinion/juniper trees. If not required or built in connection with previously approved permits to drill, a locked gate should be required on the access road where it crosses Evacuation Creek.

2C-13-4S-104: approximately 1.2 miles of new road would be constructed. This same road would also serve the 16C-24, 7C-24, and 1C-24 wells. A 4" buried steel gas line (to be constructed by Canyon Gas) and a 4" buried poly water line would parallel the new road for its entire length. Maximum disturbed width for all three would not exceed 40 feet. The pad would be approximately 150' by 270', with an additional 100' by 150' area for the pit and spoil piles. Total disturbance would be approximately 7 acres.

1C-23-4S-104: proposed pad is approximately ¼ mile west of Whiskey Creek, and would be approximately 150' by 270', with an additional 100' by 150' area for the pit and spoil piles. A corridor of approximately 1600' by 40' would be located from the pad to the Whiskey Creek road for the location of a new access road, a 4" buried steel gas pipeline (Canyon Gas), and a 4" buried poly waterline. Total disturbance would be approximately 2.74 acres.

16C-24-4S-104: well lies just east of the proposed access to the 2C-13 well location, in the NENE, sec. 24, 4S 104W (see attached map). The pad would be approximately 150' by 270' with an additional pit area of approximately 70' by 120'. Maximum pad disturbance would be about 1.25 acres. Approximately 400' of new road (15' running surface) would be constructed with a maximum disturbed width of 40 feet (about 0.37 acres). Evergreen would bury approximately 400' of 4" OD poly waterline, and Canyon Gas would bury approximately 400' of 4" OD steel gas line along the road within the area disturbed for road construction. Total disturbance for this well would not exceed approximately 1.62 acres.

2C-1-4S-104: well lies approximately ½ mile east of the 4C-1 well location, in lot 2, sec. 1, 4S, 104W (see attached map). The pad would be essentially the same as the one noted above, with a total disturbance of approximately 1.25 acres. A corridor of approximately 2700' by 40' (total disturbance of approximately 2.5 acres) would be developed for the access road, 4" buried steel gas line (Canyon Gas), and 4" OD buried poly water line as noted above. Maximum total disturbance would be 3.75 acres for this well. If a culvert is used in the crossing:

- Evergreen shall make the culvert/crossing as perpendicular to the gully crossing as possible. A 404 Permit from the Army Corp of Engineers will be required before any dirt work in the drainage has begun; this permit will have to be reviewed by the BLM as well.
- Approaches to the culvert should be stabilized with fabric /gravel/water bars as needed to reduce erosion.
- All disturbance connected with this crossing should receive special attention for reclamation, i.e. back slopping of 3' to 1', fabric and/or hydro mulching, etc.

13C-14-4S-104: well is located on the Davis Canyon Road in the NWNW of sec. 14, 4S, 104W (see attached map). Again, the pad would be essentially the same as the ones above, with a total disturbance of approximately 1.25 acres. There would be no new access road, and the 4" buried steel gas line (again, Canyon Gas), and 4" buried poly water line would not result in new disturbance. They would run approximately 25 feet across the pad to lines analyzed and approved in CO-110-2004-113-ea for the 9C-15 well (among others).

No Action Alternative: The APDs would be denied. No access roads, well pads, or pipeline would be constructed.

NEED FOR THE ACTION: To respond to the request by the applicant to exercise lease rights and develop hydrocarbon reserves.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Page 2-5

Decision Language: "Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values."

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: There are no special air quality designations or non-attainment areas in the vicinity of the proposed action.

Environmental Consequences of the Proposed Action: The proposed action would result in short term, local impacts to air quality during and after construction, due to dust being blown into the air. However, airborne particulate matter should not exceed Colorado air quality standards on an hourly or daily basis.

Environmental Consequences of the No Action Alternative: Impacts are not anticipated from the no-action alternative.

Mitigation: Applicant will spread water on road surfaces to control fugitive dust.

CULTURAL RESOURCES

Affected Environment: 4C-1-4S-104 well pad, access road and well tie pipeline: The proposed location, access road and pipeline have been inventoried at the Class III (100% pedestrian) level (Brogan 2004, Compliance Dated 5/25/2004) with no resources identified in the project area.

10C-12-4S-104 well pad, access road and well tie pipeline: The proposed location, access road and pipeline have been inventoried at the Class III (100% pedestrian) level (Brogan 2004, Compliance Dated 5/25/2004) with no resources identified in the project area.

12C-12-4S-104 well pad, access road and well tie pipeline: The proposed location, access road and pipeline have been inventoried at the Class III (100% pedestrian) level (Brogan 2004, Compliance Dated 5/25/2004) with no resources identified in the project area.

2C-13-4S-104 well pad and access road: the proposed well location and access road have been inventoried at the Class III (100% pedestrian) level (Brogan and Hall 2004, Compliance Dated 6/29/2004) with no new cultural resources identified in the inventory area.

1C-23-4S-104 well pad, access road and well tie pipeline: The proposed well pad, access road and well tie pipeline have been inventoried at the Class III (100% pedestrian) level (Jennings and O'Brien 2004, Compliance Dated 9/30/2004) with one new cultural resource located during inventory.

16C-24-4S-104: well pad, access road and well tie pipeline: the proposed well pad, access road and well tie pipeline have been inventoried at the Class III (100% pedestrian) level (Brogan 2004, Compliance Dated 5/25/2004, Jennings 2004, Compliance Dated 9/16/2004) with no new cultural resources recorded in the project area.

13C-14-4S-104 well pad and relocation: the proposed well pad and its relocation have been inventoried at the Class III (100% pedestrian) level (Brogan 2004, Compliance Dated 5/25/2004, Jennings 2004, Compliance Dated 9/16/2004) with one site located in the areas inventoried.

2C-1-4S-104 well pad, access road and well tie pipeline: the proposed well pad, access road and well tie pipeline have been inventoried at the Class III (100% pedestrian) level (Brogan 2004, Compliance Dated 5/25/2004) with no new cultural resources identified in the inventory area.

Environmental Consequences of the Proposed Action: 4C-1-4S-104 well pad, access road and well tie pipeline: the proposed action will not impact any currently know cultural resources. 10C-12-4S-104 well pad, access road and well tie pipeline: the proposed action will not impact any currently know cultural resources. 12C-12-4S-104 well pad, access road and well tie pipeline: the proposed action will not impact any currently know cultural resources. 2C-13-4S-104 well pad and access road: the proposed action will not impact any currently know cultural resources. 16C-24-4S-104: well pad, access road and well tie pipeline: there would be no new impact to any known cultural resources from the construction of this well pad, access road and well tie pipeline.

1C-23-4S-104 well pad, access road and well tie pipeline: the access road and well tie pipeline will impact one newly recorded cultural resources.

13C-14-4S-104 well pad and relocation: If mitigation measures are strictly adhered to there is a very limited probability to adversely impact cultural resources. 2C-1-4S-104 well pad, access road and well tie pipeline: there would be not impacts to any know cultural resources during construction of this well pad and road.

Environmental Consequences of the No Action Alternative: There would be no new impacts to cultural resources under the No Action Alternative.

Mitigation: For all well pads, access roads and well tie pipelines; the following mitigation will apply:

1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever

recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

Additional mitigation for 1C-23-4S-104 well pad, access road and well tie pipeline:

1. Impacts to the site are to be strictly limited to a gap in the brush fence 5RB 2257 of no more than 30 feet maximum where the access road and well tie pipeline cross the fence line/site.

Additional mitigation for 13C-14-4S-104 well pad, access and pipelines:

1. Site 5RB 4736 must be avoided by all construction, well and pipeline operations and maintenance.

2. At least once per year for the life of the well the rock art site must be inspect for vandalism and a report submitted to the BLM at the holders expense.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: Three vegetation types are represented in the proposed action. They are pinyon/juniper woodland, upland sage and bottom sage/greasewood. The pinyon/juniper community has shallow sandstone derived soils with a very sparse understory of grasses and forbs. The bottom sage/greasewood community has deep soils and contains sagebrush, greasewood, blue grama, and cheatgrass. The upland sage community contains sagebrush, winterfat, shadscale, salina wildrye, needle-and-thread grass, Indian ricegrass and cheatgrass.

Several noxious weed species have been found in the area including Russian and spotted knapweed, bull and musk thistle, hoary cress and cheatgrass. The outbreaks of knapweed were on well pads and were probably transported on site by construction equipment or support vehicles. All of the sites found have been treated and controlled.

Environmental Consequences of the Proposed Action: Using the proposed seed mix should establish quickly and stabilize soils. The seed mix contains non-native species and these are recommended because of the harsh environmental conditions. The recommended species have not been shown to hybridize with adjacent plant species or to move offsite. Controlling noxious weeds as described by mitigation would prevent noxious weed species from moving off-site and establishing in the adjacent plant communities.

Environmental Consequences of the No Action Alternative: There would be no impacts.

Mitigation: From the WRRRA ROD/RMP of 1997, Appendix B, Application of herbicides must be under field supervision of an EPA-certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.

Seed species used in reseeding disturbed areas will be based on the seed mixes identified in table B1 and B2. These mixes are based on range sites as determined by soils. Use Standard Seed Mix #2 listed below.

Table B-1. Standard Seed Mixes

Seed Mix #	Species (Variety)	Lbs PLS/ Acre	Range sites
2	Western wheatgrass (Arriba)	3	Alkaline Slopes, Clayey Foothills, Clayey Slopes, Claypan, Mountain Shale
	Pubescent wheatgrass (Luna)	2	
	Russian wildrye (Bozoisky)	2	
	Crested wheatgrass (Fairway/Ephraim)	2	
	Yellow sweetclover (Madrid)	0.5	
	Fourwing saltbush (Wytana/Rincon)	2	
	Alternates: Winterfat		

MIGRATORY BIRDS

Affected Environment: Non-game populations associated with these ranges are widespread and common throughout sagebrush, pinyon-juniper and mountain shrub habitats in this Resource Area (e.g., green-tailed and spotted towhee, vesper and lark sparrows). There are no specialized or narrowly endemic species known to occupy the project area.

Environmental Consequences of the Proposed Action: Although this action would represent an incremental and longer term reduction in the extent of sagebrush, pinyon-juniper and mountain shrub habitat available for migratory bird breeding functions, implementation of this project would have no measurable influence on the abundance or distribution of breeding migratory birds even at the smallest landscape scale.

Environmental Consequences of the No Action Alternative: Incremental reductions of sagebrush, pinyon-juniper and mountain shrub rangelands would not occur at this time or place.

Mitigation: None.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: There are no threatened, endangered or sensitive animal species known to occur within the project area.

Environmental Consequences of the Proposed Action: None.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for Threatened & Endangered species: There are no threatened, endangered or sensitive animal species known to occur within the project area. Therefore, this standard is not applicable.

WASTES, HAZARDOUS OR SOLID

Affected Environment: Hazardous or solid wastes are not expected to be a part of the affected environment. However, these materials may accidentally be introduced in the environment through the implementation of the proposed action. Fuel, oil, grease, and antifreeze are all associated with vehicles and fire suppression equipment associated with implementing the proposed action and would only be introduced into the environment because of equipment failure. Minute loss of these materials through normal operation of equipment, maintenance and fueling procedures are not considered spills. Spills are generally defined as the loss of large quantities of these materials into the environment and are determined to be a spill on a case-by-case basis.

Environmental Consequences of the Proposed Action: For any given accident or incident involving hazardous materials, consequences will be dependent on the volume and nature of the incident and material released. Short term impacts such as contaminations of soils, vegetation, and surface water could occur.

Environmental Consequences of the No Action Alternative: No hazardous wastes would be introduced into the environment under the no action alternative.

Mitigation: The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The table below correlates the proposed well to drainage locations. All of the listed drainages are tributary to the White River in Utah.

WELL NUMBER	DRAINAGE NAME
2C-1	Evacuation Creek
4C-1	Evacuation Creek
10C-12	Evacuation Creek

12C-12	Evacuation Creek
2C-13	Evacuation Creek
16C-24	Evacuation Creek
13C-14	Davis Canyon
1C-23	Whiskey Creek

As required by the Clean Water Act, the state of Utah has designated the White River from the Colorado-Utah state line to its confluence with the Green River as fully supporting of all of its beneficial use classifications. This stream reaches beneficial use classifications are: Recreation and Aesthetics, 2B; and Aquatic Life Use Support, 3C. Four parameters have been listed on the Numeric Criteria for this reach. These are: dissolved oxygen, 5.5 mg/l; pH, 6.5-9.0; maximum Fecal Coliform, 2000/100mL; and maximum Total Coliform, 5000/100mL. For these parameters, a fully supporting rating indicated the criterion was not exceeded in more than 10% of the samples collected. While the highest level of water quality protection does not apply to these waters, they are protected for their existing uses and from further degradation as a result of non-point source (sediment) pollution.

Environmental Consequences of the Proposed Action: One problem that could arise from the proposed action would be an increase in sediment transport. Annual runoff from these watersheds is dynamic and dependent on some aspects we control, such as the amount of vegetation retained for watershed protection and vegetation density. Depleting the vegetation cover needed to protect watersheds from raindrop impact and runoff could cause short-term erosion problems and increased sedimentation to Evacuation Creek and on down to the White River until successful best management practices (BMPs) have been implemented and proven successful. The magnitude of these impacts is dependent on the amount of surface disturbance, climatic conditions during the time the soils are exposed to the elements and the success of the mitigation proposed in the proposed action.

Environmental Consequences of the No Action Alternative: No impacts from the no-action alternative are anticipated.

Mitigation: Through the use of BMPs, keep sediment from leaving the proposed sites.

All disturbed areas including the cut and fill slopes not necessary for production will be promptly recontoured and revegetated using the recommended seed mix in the Vegetation section below.

REQUIREMENTS for all Evacuation Creek stream crossings:

- Make the crossings as perpendicular to the creek channel as possible.
- Any material cut from the banks to make the approach to the creek shall be hauled and used in the construction of the roads.
- After drilling, if the wells produce, the BLM will require that the approaches to the creek be stabilized with fabric/gravel, etc as needed to make a good year-round access. Also the creek bed will have to be stabilized by excavation and the placement of fabric/large rocks, etc as needed. A 404 permit will have to be obtained from the Army Corp of

Engineers before any excavation take place in the channel; this permit will have to be reviewed by the BLM as well before any work is done.

- After major stream flow events, Evergreen will be required to haul sediment deposits from the road and use those materials on access roads.

See Soils for additional mitigation.

Finding on the Public Land Health Standard for water quality: The water quality of Evacuation Creek is well within the criteria set by the state, thus meeting the land health standard. The proposed action will not change this status if the mitigation adhered to.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: The access road to four wells in this package (4C-1-4S-104, 2C-1-4S-104, 10C-12-4S-104 and 12C-12-4S-104) crosses the main stem of Evacuation Creek, a perennial stream. The location of the crossing essentially lacked riparian character (no vegetation present at on site visit).

Environmental Consequences of the Proposed Action: The potential exists for sediment deposition into Evacuation Creek from road upgrade construction. Compaction from heavy equipment is also possible. The road upgrade and well will increase the number of vehicles crossing Evacuation Creek. By following suggested mitigation, this will limit motor vehicle access and impacts to the stream.

Environmental Consequences of the No Action Alternative: No sedimentation, compaction or increase in traffic would occur at this time or place.

Mitigation: If the wells are producers, Evergreen will construct a low water crossing perpendicular to Evacuation Creek and rock the stream crossing and the approaches. All excess material from the construction/road upgrade will be hauled from the creek crossing.

Additionally, a locked gate will be placed on the road at an appropriate location determined by the Authorized Officer where it crosses Evacuation Creek.

Finding on the Public Land Health Standard for riparian systems: This project would not jeopardize the viability of riparian systems. It would have no significant consequence on terrestrial habitat condition, utility, or function, nor have any discernible affect on riparian systems at any landscape scale. This public land health standard will thus be met.

WILDERNESS

Affected Environment: Well 1C-23-4S-104 is located within the externally identified citizens wilderness proposed Dragon Canyon area.

Environmental Consequences of the Proposed Action: Any potential naturalness or solitude will be affected within the vicinity of well 1C-23-4S-104 with the construction and operation of this well.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No ACEC's, flood plains, prime and unique farmlands, or Wild and Scenic Rivers, threatened, endangered or sensitive plants exist within the area affected by the proposed action. For threatened, endangered and sensitive plant species Public Land Health Standard is not applicable since neither the proposed nor the no-action alternative would have any influence on populations of, or habitats potentially occupied by, special status plants. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: Baseline soils data have been collected for Rio Blanco County by the NRCS and are published in an order III Soil Survey. This survey is available for review from the White River Field Office. The majority of the proposed access roads and well pads are in soil mapping unit #74, Rentsac-Moyerson-Rock Outcrop Complex. The table below identifies soil characteristics for these soil types.

Proposed Action	Soil Number	Soil Name	Slope	Range site	Salinity	Run Off	Erosion Potential	Special Designation
10C-12	5	Badland	50-100%	None		Very rapid	Very high	CSU-1
Access Road 1C-23	41	Havre loam	0-4%	Foothill Swale	<4	Medium	Slight	Saline
1C-23	48	Kobar silty clay loam	3-8%	Deep Clay Loam	<2	Medium to rapid	Moderate	None
4C-1 13C-14	53	Moyerson stony clay loam	15-65%	Clayey Slopes	2-4	Rapid	Very high	None None
12C-12 2C-13 16C-24	74	Rentsac-Moyerson-Rock	5-65%	PJ Woodlands/ Clayey	<2	Medium	Moderate to very high	CSU-1 Road CSU1 None

Proposed Action	Soil Number	Soil Name	Slope	Range site	Salinity	Run Off	Erosion Potential	Special Designation
2C-1		Outcrop complex		Slopes				None

Typically, as much as 2% of the surface is covered with stones. The surface layer is a brown flaggy loam about 12 inches thick. The next layer is pale brown channery loam about 9 inches thick. Sandstone is at a depth of 43 inches. The soils are calcareous throughout. Revegetation limitations for these soil types include an arid climate and droughty soil condition. Several have been designated as CSU-1, which indicates problems such as fragile soil, high salt concentrations, excessive erosion, or steep slopes. These special well pad designations have been identified in the table above. CSU-1 stipulation description states, surface-disturbing activities will be allowed only after the operator submits an engineered construction/ reclamation plan and approved by the Area Manager. The plan would address how soil productivity would be restored and how surface runoff would be treated to avoid accelerated erosion and mass wasting. Exceptions would be granted if after environmental analysis the proposed action did not fit the criteria identifying fragile soils on slopes greater than 35% or the disturbance would not result in any long-term decrease in site productivity or increased erosion.

Environmental Consequences of the Proposed Action: General impacts associated with oil and gas and road development include but are not limited to, loss of topsoil, soil compaction and possible increase in sediment loads to the White River. The primary surface-disturbing impact would be a potential increase in sediment transport from runoff events after the protective vegetative cover has been removed.

Because the road and well pads are in an area that has been identified as CSU-1, it is important to recognize the increased erosion potential and designing best management practices (BMPs), which will minimize this erosion. The wells themselves are not on slopes greater than 35%, but the roads traverse slopes that are greater than 35% and based on the way they are designed will make a difference to erosion potential. Submitting a copy of the Stormwater Discharge Plan, which is required by the State (Stormwater Discharge Permit) identifying how BMPs will be used to reduce stormwater discharge and erosion off of the roads, could replace the construction/reclamation plan required by the BLM.

BMPs used to slow runoff, trap sediment and prepare reclaimed areas for seeding would also help reduce soil loss. With an explanation of how these BMPs will be used and implementation of these BMPs, impacts are expected to be short in duration, during the construction phase and for a short time after construction until successful reclamation is achieved.

Environmental Consequences of the No Action Alternative: Impacts are not anticipated from not permitting the proposed action.

Mitigation: Submit a copy of the Stormwater Discharge Plan, which is required by the State identifying how BMPs will be used to reduce stormwater discharge.

In addition, the following COA from Appendix B, White River ROD/RMP should be applied.

Water bars or dikes shall be constructed on all of the rights-of-way, and across the full width of the disturbed area, as directed by the authorized officer.

Slopes within the disturbed area shall be stabilized by non-vegetative practices designed to hold the soil in place and minimize erosion. Vegetative cover shall be reestablished to increase infiltration and provide additional protection from erosion.

When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff

Finding on the Public Land Health Standard for upland soils: Soils at the proposed location do not meet the criteria established in the Public Land Health Standard. The proposed action would not change this status.

VEGETATION (includes a finding on Standard 3)

Affected Environment: Three vegetation types are represented in the proposed action. They are pinyon/juniper woodland, upland sage and bottom sage/greasewood. The pinyon/juniper community (18.85 acres) has shallow sandstone derived soils with a very sparse understory of grasses and forbs. The bottom sage/greasewood community (6.2 acres) has deep soils and contains sagebrush, greasewood, blue grama, and cheatgrass. Generally these bottom sites are in low-seral stage relative to the climax communities. This is the result of past livestock grazing practices which were through the growing season. The upland sage community (1.25 acres) contains sagebrush, winterfat, shadscale, salina wildrye, needle-and-thread grass, Indian ricegrass and cheatgrass. These upland sagebrush sites are in mid-seral condition as a result of past livestock grazing practices. The pinyon/juniper sites contain old growth characteristics of large trees with sparse understory and suppressed regrowth.

Environmental Consequences of the Proposed Action: Vegetation on the three described vegetation types would be removed during the life of the project. Following reclamation all these sites would be stabilized by reclamation within three years and would then revert back to the native vegetation. On the sagebrush associations it is expected that sage would be dominant within 20 years. On the pinyon /juniper communities are expected to have seedling pinyon and juniper within 30 years and develop old growth characteristics in between 150 and 300 years.

Environmental Consequences of the No Action Alternative: There would be no impacts.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): The sagebrush communities in the bottoms do not meet the standards for plant health. There is an abundance of cheatgrass which prevents growth during a portion of the season. The cheatgrass it that it dominates the area does not meet the standard.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: No aquatic wildlife is known to occupy or derive important benefit from Evacuation Creek within the project area.

Environmental Consequences of the Proposed Action: None.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): No aquatic wildlife is known to occupy or derive important benefit from Evacuation Creek within the project area. The health standard is thus not applicable.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: 4C-1-4S-104: This pad is located in a box canyon consisting of greasewood and sagebrush. Uplands surrounding the pad are dominated by rimrock and pinyon-juniper woodlands. Raptor nesting potential is moderate to high. No nests were observed during an onsite visit conducted 25 March 2004. The access road crosses Evacuation Creek.

10C-12-4S-104: This location consists of heavy timber of pinyon-juniper forest. The access road crosses Evacuation Creek (see riparian section). Raptor nesting potential is high in the vicinity though no nests were observed.

12C-12-4S-104: The road to this pad crosses approximately 0.4 miles of pinyon-juniper trees. The pad is also dominated by pinyon-juniper and is located on a saddle. Understory vegetation includes yucca and Ephedra.

2C-13-4S-104: This pad involves the construction of about 1.2 miles of new road. Both the road and pad occupy areas dominated by mature pinyon-juniper woodlands generally holding high potential for nesting by raptors.

1C-23-4S-104: The access road crosses a large gully near the pad location. The pad sits in a grassy meadow with sagebrush that will require the relocation of an ephemeral draw upon construction.

16C-24-4S-104: This pad is located on the same 1.2 mile road that leads to location 2C-13. The location consists of mature pinyon-juniper woodlands holding high potential for nesting raptors.

2C-1-4S-104: This pad involves the same access issues as 4C-1 (crosses Evacuation Creek) and is similarly located in a box canyon consisting of greasewood and sagebrush with uplands consisting of rimrock and pinyon-juniper woodlands. Nesting potential is high for both the rimrock outcrops as well as the pinyon-juniper.

13C-14-4S-104: This location is located on an existing road. The pad is flat and consists mostly of cheat grass with sparse occurrences of sagebrush and greasewood.

All pads and associated pipelines are located in severe winter range for elk as designated in the White River Resource Management Plan and Record of Decision (RMP).

Environmental Consequences of the Proposed Action: The construction of this project will result in a long-term increase of road traffic associated with commercial oil/gas related activities. The development of commercial oil/gas facilities results in incremental reductions of severe winter range habitat for elk. Additionally, it will result in increased activity in an area holding moderate to high potential for nesting by raptors, as well as an increase in the disturbance from additional road traffic. It will result in the direct loss of approximately 28 acres of severe winter range habitat for elk.

Environmental Consequences of the No Action Alternative: Failure to construct this well package would reduce short-term construction activity levels in this area as well as longer term activity associated with increased road traffic related to commercial oil/gas development. No net loss of severe winter range habitat would occur at this time or place.

Mitigation: All wells for this package fall within designated Severe Winter Range for elk. As a condition of approval, the BLM may preclude development activities for up to 60 days from December 1 through April 30. Local weather conditions will dictate whether this condition is in effect or not. It is the responsibility of Evergreen to contact the BLM to determine whether this condition is in effect prior to initiating surface disturbing activities.

A current raptor survey must be obtained from the BLM for these wells if construction and completion activities for this well package are scheduled between August 15 and February 1. It is the responsibility of Evergreen to contact the BLM to obtain a current survey.

A locked gate shall be installed at the point of new road construction for the proposed road into wells 1C-24, 7C-24, 16C-24 and 2C-13 in such a manner/location as to effectively preclude motor vehicle access to avoid disturbance to big game. Installation may include fence extensions from the gate if necessary to effectively preclude access.

A second locked gate shall be installed near at or before the crossing of Evacuation Creek that accesses wells 4C-1, and 2C-1 meeting the above specifications to effectively preclude access.

A third locked gate shall be installed on the access road going to well 10C-12 and 12C-12 at or before the crossing of Evacuation Creek in a manner to effectively preclude motor vehicle access.

Production of wells will be established prior to pipeline construction.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): This project would not jeopardize the viability of any animal population. It would have no significant consequence on terrestrial habitat condition, utility, or function, nor have any discernible affect on animal abundance or distribution at any landscape scale. This public land health standard will thus be met.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			
Cadastral Survey	X		
Fire Management			
Forest Management			X
Geology and Minerals			
Hydrology/Water Rights	X		
Law Enforcement		X	
Paleontology			X
Rangeland Management			
Realty Authorizations			X
Recreation			
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

ACCESS AND TRANSPORTATION

Affected Environment: Proposed wells 1C-23-4S-104 and 16C-24 occur in an area that is open seasonally to off-road travel while the remainder of the proposed wells occurs in an existing routes only area. Rio Blanco County Road 25 and BLM 1234 are the main accesses to the project area.

Environmental Consequences of the Proposed Action: An increase in traffic would be expected if roads and pads are constructed. An increase in off road travel could also be expected off of newly developed roads and well pads.

Environmental Consequences of the No Action Alternative: None.

Mitigation: No off road use will be permitted outside of identified road corridors. Any new unneeded routes created during construction and/or layout of roads and well pads shall be closed and rehabilitated.

FIRE MANAGEMENT

Affected Environment: Wells 10C-12-4S-104, 12C-12-4S-104, 2C-13-4S-104, 16C-24-4S-104 proposed involves approximately 12 acres of drill pad clearing and road clearing disturbance. Due to the existing tree cover of pinion and juniper, there will be a need for the operator to clear trees from the identified sites. If not adequately treated, these trees will result in elevated hazardous fuels conditions and remain on-site for many years. These accumulations of dead material are very receptive to fire brands and spotting from wind driven fires and can greatly accelerate the rate of spread of the fire front. The road(s) associated with this project may be used by the general public for a variety of uses, including access for fire wood gathering, hunting and other dispersed recreational activities. Increased public use of an area will nearly always result in an increased potential for man-caused wildland fires.

The National Fire Plan calls for “firefighter and public safety” to be the highest priority for all fire management activities. In the pinion, juniper, and brush types common on the White River Resource Area, roads and other man-made openings are commonly used as fuel breaks or barriers to control the spread of both wildland and prescribed fires. By reducing the activity fuels created from this proposal, future fire management efforts in this area should be safer for those involved and more effective.

Environmental Consequences of the Proposed Action: There will be approximately 12 acres of road and well pad construction requiring the removal of pinion/juniper fuel type on the proposed well sites and access routes. If not treated the slash and woody debris will create an elevated hazardous dead fuel loading which could pose significant control problems in the event of a wildfire. Additionally there would be greater threat to public, Evergreen/contract, and fire suppression personnel. The other locations proposed by this action are not located in or go through significant pinion/juniper and therefore will not create the dead fuel accumulation anticipated with the mentioned well locations.

Environmental Consequences of the No Action Alternative: There would be no tree removal or disturbance which would cause significant dead fuel loading.

Mitigation: Several options may be considered for treatment of slash from this project. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This would effectively breakdown the woody fuel and scatters the debris thereby eliminating any hazardous fuel load adjacent to the new road and/or well pad. The other option would be to cut trees and have them removed for firewood, posts, or other products. The branches and tops should be lopped and scattered to a depth of 24

inches or less. If the products are left for collection by the general public, they should be piled along the road side or pad to facilitate removal.

FOREST MANAGEMENT

Affected Environment: The project area contains pinyon/juniper woodlands. For the most part these stands contain old growth characteristics. These woodlands are valuable locally as a source of firewood and posts for fence construction.

Environmental Consequences of the Proposed Action: The proposed project would remove approximately 18.85 acres of pinyon/juniper woodland. The permit holder is required to purchase this woodland material and dispose of it as described in mitigation. Following reclamation these woodlands would be colonized by pinyon and junipers within 30 years and would develop old growth characteristics between 150 and 300 years.

Environmental Consequences of the No Action Alternative: There would be no impacts.

Mitigation: From the White River ROD/RMP of 1997, Appendix B, 7. All trees removed in the process of construction shall be purchased from the Bureau of Land Management. The trees shall be cut with a maximum stump height of six inches and disposed of by one of the following methods:

a. Trees must be cut before being dozed off the area of disturbance. Trees shall be cut into four-foot lengths, down to four inches in diameter and placed along the edge of the disturbance.

b. Purchased trees may be removed from federal land for resale or private use. Limbs may be scattered off the area of disturbance but not dozed off.

c. Chipped and scattered.

GEOLOGY AND MINERALS

Affected Environment: The surface geologic formation of the well locations 13C-14, 4C-1, and 2C-1 is alluvial and 12C-12, 10C-12, 10C-12, 2C-13, 16C-24, and 1C-23 is Wasatch. Evergreen's targeted zone is in the Mesaverde. During drilling potential water, coal and gas zones will be encountered from surface to the targeted zone. These wells are located on existing Federal Oil and Gas leases COC-7868, COC-10700 and COC-10179.

Environmental Consequences of the Proposed Action: Cementing procedure of the proposed actions isolates the formations and will prevent the migration of gas, and water between formations. The coal zones located the Mesaverde will also be isolated during this procedure. Development of these wells will deplete the hydrocarbon resources in the targeted formation.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

PALEONTOLOGY

Affected Environment: 4C-1-4S-104 well pad, access road and well tie pipeline, 10C-12-4S-104 well pad, access road and well tie pipeline, 12C-12-4S-104 well pad, access road and well tie pipeline, 2C-13-4S-104 well pad, 1C-23-4S-104 well pad, access road and well tie pipeline, 16C-24-4S-104 well pad, access road and well tie pipeline, and 2C-1-4S-104 well pad, access road and well tie pipeline: the proposed locations, access road and well tie pipeline are in an area mapped as the Mesa Verde Formation (Tweto 1979) which the BLM has categorized as a Condition I formation meaning it is known to produce scientifically important fossil resources.

13C-14-4S-104 well pad: The proposed well pad location is in an area mapped as the Mesa Verde (Tweto 1979) which the BLM has classified as a Condition I formation meaning it is a known producer of scientifically important fossil resources. However, it is likely that the well pad is located in an area of some deep alluvial deposits in which case the formation may not be impacted.

Environmental Consequences of the Proposed Action: For 4C-1-4S-104 well pad, access road and well tie pipeline, 10C-12-4S-104 well pad, access road and well tie pipeline, 12C-12-4S-104 well pad, access road and well tie pipeline, 2C-13-4S-104 well pad, access road and well tie pipeline, 1C-23-4S-104 well pad, access road and well tie pipeline, 2C-1-4S-104 well pad, access road and well tie pipeline, and 16C-24-4S-104 Well pad, access and well tie pipeline: if it should become necessary to excavate into the underlying bedrock formation at any time to construct the road, level the well pad, construct the reserve/blooiie pit or bury the well tie pipeline there is a potential to adversely impact fossil resources.

13C-14-4S-104 well pad: Unless the soil on the location is shallower than expected it is unlikely that fossil resources will be impacted. However if it becomes necessary to excavate into the underlying bedrock formation to level the well pad or excavate the reserve/blooiie pit there is a potential to impact fossil resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to fossil resources under the No Action Alternative.

Mitigation: For 4C-1-4S-104 well pad, access road and well tie pipeline, 10C-12-4S-104 well pad, access road and well tie pipeline, 12C-12-4S-104 well pad, access road and well tie pipeline, 2C-13-4S-104 well pad, access road and well tie pipeline, 1C-23-4S-104 well pad, access road and well tie pipeline, 2C-1-4S-104 well pad, access road and well tie pipeline, and 16C-24-4S-104 Well pad, access and well tie pipeline : All exposed rock outcrops in the proposed area must be inventoried by an approved paleontologist with a report detailing the results of the inventory and detailed mitigation recommendations, if appropriate, submitted to the

BLM prior to the initiation of construction. If at any time it becomes necessary to excavate into the underlying bedrock formation to construct the road, level the well pad, construct the reserve/blooiie pit or bury the well tie pipeline a paleontological monitor shall be present for such excavations.

13C-14-4S-104 well pad: If at any time it becomes necessary to excavate into the underlying bedrock formation to construct the road, level the well pad, construct the reserve/blooiie pit or bury the well tie pipeline a paleontological monitor shall be present for such excavations.

RANGELAND MANAGEMENT

Affected Environment: The proposed project is within the Evacuation Creek grazing allotment. This allotment contains 7253 Animal Unit Months and is grazed by cattle, in a cow/calf operation on a year-round operation on public lands. This area is used during the spring and fall. Range improvements include the pasture fence which runs from the state line to Whiskey Creek. Currently at the crossing of Davis Creek there is a metal gate. This will need to be upgraded to a cattle-guard to prevent leaving the gate open. There is also an artesian well in Davis Canyon which is fenced to protect riparian values.

Environmental Consequences of the Proposed Action: With placement of a cattleguard there will be few problems with cattle moving through an open gate. The drilling program will decrease the forage available for livestock amounting to approximately 2 AUMs which would be positively offset in the near future by forage produced from reclaimed sites.

Environmental Consequences of the No Action Alternative: There would be no impacts.

Mitigation: A cattleguard to BLM specifications is to be installed at the fence crossing in the mouth of Davis Canyon

REALTY AUTHORIZATIONS

Affected Environment: Access for 4C-1-4S-104, 2C-1-4S-104, 13C-14-4S-104, 10C-12-4S-104, and 12C-12-4S-104 will be on lease. Access to 16C-24-4S-104 will be partially on lease, partially on private lands, and partially off lease. Access to 2C-13-4S-104 and 1C-23-4S-104 will require a right-of-way. Water lines shall follow these road rights-of-way.

Several pipeline and power line rights-of-way exist in the area, including Canyon Gas, Mapco, Northwest Pipeline, and Moon Lake Electric along the County Road 25 corridor, road ROWs, D and G Roustabouts pipeline, and on lease facilities.

Environmental Consequences of the Proposed Action: Rights-of-way for the off-lease portions of access and water pipelines will be authorized by an amendment to existing ROW COC67528. Proposed access road, water lines, and future gas pipelines will cross and/or parallel existing ROWs.

Environmental Consequences of the No Action Alternative: If no wells are drilled, there will be no access or pipelines authorized.

Mitigation: Applicant is responsible for locating and co-coordinating with existing right-of-way holders. Colorado One Call procedure must be activated before trenching or other earthwork is begun.

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

The project areas and the surrounding Whiskey Creek resemble a Recreation Opportunity Spectrum (ROS) class of Semi-Primitive Motorized (SPM). SPM recreation setting is typically characterized by a natural appearing environment with few administrative controls, low interaction between users but evidence of other users may be present. SPM recreation experience is characterized by a high probability of isolation from the sights and sounds of humans that offers an environment that offers challenge and risk.

Environmental Consequences of the Proposed Action: The public will lose approximately 28 acres of dispersed recreation potential while wells are in operation. The public will most likely not recreate in the vicinity of these facilities and will be dispersed elsewhere. If action coincides with hunting seasons (September through November) it will most likely disrupt the experience sought by those recreationists.

With the introduction of new well pads and roads, an increase of traffic could be expected increasing the likelihood of human interactions, the sights and sounds associated with the human environment and a less naturally appearing environment. As more roads and pads are constructed, the ROS class will likely move towards a more Roaded Natural character.

Environmental Consequences of the No Action Alternative: No loss of dispersed recreation potential and no impact to hunting recreationists.

Mitigation: None.

VISUAL RESOURCES

Affected Environment: The proposed actions for wells #1C-23-4S-104, 4C-1-4S-104, 10C-12-4S-104, 12C-12-4S-104, 2C-13-4S-104, 16C-24-4S-104, 2C-1-4S-104, & 13C-14-4S-104 are located within a VRM class III area. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be

moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Environmental Consequences of the Proposed Action: The proposed action for well #1C-23-4S-104 is located on a bench above Whiskey Creek drainage and below the crest of the ridge line. An existing road in the bottom of Whiskey Creek can only be accessed by traveling through private property. A casual observer traveling on the existing road in Evacuation Creek (approximately 2 miles distance) would not be able to view the well pad since the view would be obstructed by ridges, vegetation, and the elevated location of the well pad. By utilizing low profile production equipment and painting all facilities Juniper Green to blend with surrounding vegetation, the level of change to the characteristic landscape would be low. Since the level of change would be low and not attract the attention of the casual observer, the standards of the VRM III classification are retained.

The proposed actions for wells #2C-1-4S-104 and 4C-1-4S-104 are located in the bottom of canyons blocked from view for a casual observer traveling on the road in Evacuation Creek. The proposed actions for wells # 12C-12-4S-104 and 10C-12-4S-104 are located on intermediate benches above the road on Evacuation Creek and not visible by a casual observer traveling on the road in Evacuation Creek. The proposed actions for wells #2C-13-4S-104 and 16C-24-4S-104 are located on benches on a ridge between West Evacuation Creek and Whiskey Creek below the crest of the ridge and not visible from the existing road in Evacuation Creek which would be the route traveled by a casual observer. By utilizing low profile production equipment and painting all facilities Juniper Green to blend with surrounding vegetation, the level of change to the characteristic landscape would be low. Since the level of change would be low and not attract the attention of the casual observer, the standards of the VRM III classification are retained.

The proposed action for well #13C-14-4S-104 is located in the bottom of the drainage adjacent to an existing road in Davis Canyon that is a branch road off the existing road in Evacuation Creek. The well pad would be visible for a short period of time and momentarily attract the attention of a casual observer traveling on the road in Davis Canyon. The well pad would not dominate the view since the well pad would have a back drop of steep slopes and ridges that are vegetated with various brush species and juniper trees. By painting all facilities Juniper Green to blend with surrounding vegetation, the level of change to the characteristic landscape would be moderate. Since the level of change would be moderate and not dominate the view of the casual observer, the standards of the VRM III classification are retained.

Environmental Consequences of the No Action Alternative: There would not be any additional environmental consequences from the no action alternative.

Mitigation: Install low profile production equipment and paint all production facilities Juniper Green to blend with and mimic the surrounding vegetation.

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts from oil and gas development were analyzed in the White River Resource Area Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS) completed in June 1996. An average total disturbance per well of 10 acres (including pad, road, and pipeline) was used in this analysis. Average total disturbance under the proposed action is approximately 2.89 acres per well. Therefore, current development, including the proposed action, has not exceeded the foreseeable development analyzed in the PRMP/FEIS.

REFERENCES SITED:

Brogan, John M.

- 2004 Evergreen Resources: Class III Cultural Resource Inventory for Twelve Columbine Springs Federal Well Pads and Associated Access Roads, Rio Blanco County, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado.

Brogan, John M. and Tracy Hall

- 2004 Evergreen Resources: Class III Cultural Resource Inventory for Twelve Columbine Springs Federal Well Pads and Associated Access Roads, Rio Blanco County, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado.

Jennings, Sarah L.

- 2004 Evergreen Resources, Inc.: Class III Cultural Resource Inventories of Six Proposed Columbine Springs Federal Well, Access and Pipeline Developments (2C-9-4S-103, 7C-24-4S-104, 9C-33-4S-103, 13C-14-4S-104, 15C-9-4S-103 and 16C-24-4S-104) and the Proposed Columbine Springs Federal 10C-26-4S-103 Pipeline in Rio Blanco and Garfield Counties, Colorado. Metcalf Archaeological Consultants, Inc., Eagle, Colorado.

Jennings, Sarah L. and Patrick K. O'Brian

- 2004 Evergreen Resources' Columbine Springs Federal 1C-23-4S-104 and 5C-24-4s-104 well, access, and pipeline developments: Class III Cultural Resource Inventory, Rio Blanco County, Colorado.

Tweto, Odgen

- 1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

PERSONS / AGENCIES CONSULTED:

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Carol Hollowed	P & EC	Air Quality
Tamara Meagley	NRS	Areas of Critical Environmental Concern
Tamara Meagley	NRS	Threatened and Endangered Plant Species
Michael Selle	Archaeologist	Cultural Resources Paleontological Resources
Robert Fowler	Forester	Invasive, Non-Native Species
Glenn Klingler	Wildlife Biologist	Migratory Birds
Glenn Klingler	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species, Wildlife
Bo Brown	Hazmat Collateral	Wastes, Hazardous or Solid
Carol Hollowed	P & EC	Water Quality, Surface and Ground Hydrology and Water Rights
Glenn Klingler	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	ORP	Wilderness
Carol Hollowed	P & EC	Soils
Robert Fowler	Forester	Vegetation
Glenn Klingler	Wildlife Biologist	Wildlife Terrestrial and Aquatic
Chris Ham	ORP	Access and Transportation
Ken Holsinger	NRS	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Robert Fowler	Forester	Rangeland Management
Linda L Jones	Realty Specialist	Realty Authorizations
Chris Ham	ORP	Recreation
Keith Whitaker	NRS	Visual Resources
Valerie Dobrich	NRS	Wild Horses

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2004-183-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to approve the eight Applications for Permit to Drill as described in the proposed action of the above noted environmental assessment, subject to conditions of approval derived from the mitigation noted below.

MITIGATION MEASURES:

1. Applicant will spread water on road surfaces to control fugitive dust
2. For all well pads, access roads and well tie pipelines; the following mitigation will apply:
3. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:
 - whether the materials appear eligible for the National Register of Historic Places the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
 - a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

4. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

5. Additional mitigation for 1C-23-4S-104 well pad, access road and well tie pipeline:

- Impacts to the site are to be strictly limited to a gap in the brush fence 5RB 2257 of no more than 30 feet maximum where the access road and well tie pipeline cross the fence line/site.

6. Additional mitigation for 13C-14-4S-104 well pad, access and pipelines:

- Site 5RB 4736 must be avoided by all construction, well and pipeline operations and maintenance.
- At least once per year for the life of the well the rock art site must be inspected for vandalism and a report submitted to the BLM at the holder's expense.

7. Application of herbicides must be under field supervision of an EPA-certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.

8. Seed species used in reseeding disturbed areas will be based on the seed mixes identified in table B1. These mixes are based on range sites as determined by soils. Use Standard Seed Mix #2 listed below.

Seed Mix #	Species (Variety)	Lbs PLS/ Acre	Range sites
2	Western wheatgrass (Arriba)	3	Alkaline Slopes, Clayey Foothills, Clayey Slopes, Claypan, Mountain Shale
	Pubescent wheatgrass (Luna)	2	
	Russian wildrye (Bozoisky)	2	
	Crested wheatgrass (Fairway/Ephraim)	2	
	Yellow sweetclover (Madrid)	0.5	
	Fourwing saltbush (Wytana/Rincon)	2	

9. Through the use of BMPs, keep sediment from leaving the proposed sites.

10. All disturbed areas including the cut and fill slopes not necessary for production will be promptly recontoured and revegetated using the recommended seed mix in the Vegetation section below.

11. REQUIRMENTS for all Evacuation Creek stream crossings:

- Make the crossings as perpendicular to the creek channel as possible.

- Any material cut from the banks to make the approach to the creek shall be hauled and used in the construction of the roads.
- After drilling, if the wells produce, the BLM will require that the approaches to the creek be stabilized with fabric/gravel, etc as needed to make a good year-round access. Also the creek bed will have to be stabilized by excavation and the placement of fabric/large rocks, etc as needed. A 404 permit will have to be obtained from the Army Corp of Engineers before any excavation take place in the channel; this permit will have to be reviewed by the BLM as well before any work is done.
- After major stream flow events, Evergreen will be required to haul sediment deposits from the road and use those materials on access roads.

12. If the wells are producers, Evergreen will construct a low water crossing perpendicular to Evacuation Creek and rock the stream crossing and the approaches. All excess material from the construction/road upgrade will be hauled from the creek crossing.

13. For Well # 2C-1-4S-104, the following mitigation will apply if Evergreen chooses to place a culvert in the gully crossing:

- Evergreen shall make the culvert/crossing as perpendicular to the gully crossing as possible. A 404 Permit from the Army Corp of Engineers will be required before any dirt work in the drainage has begun; this permit will have to be reviewed by the BLM as well.
- Approaches to the culvert should be stabilized with fabric /gravel/water bars as needed to reduce erosion.
- All disturbance connected with this crossing should receive special attention for reclamation, i.e. back slopping of 3' to 1', fabric and/or hydro mulching, etc.

14. Additionally, a locked gate will be placed on the road at an appropriate location determined by the AO where it crosses Evacuation Creek.

15. Submit a copy of the Stormwater Discharge Plan, which is required by the State identifying how BMPs will be used to reduce stormwater discharge.

16. Water bars or dikes shall be constructed on all of the rights-of-way, and across the full width of the disturbed area, as directed by the authorized officer.

17. Slopes within the disturbed area shall be stabilized by non-vegetative practices designed to hold the soil in place and minimize erosion. Vegetative cover shall be reestablished to increase infiltration and provide additional protection from erosion.

18. When erosion is anticipated, sediment barriers shall be constructed to slow runoff, allow deposition of sediment, and prevent it from leaving the site. In addition, straining or filtration mechanisms may also contribute to sediment removal from runoff

19. All wells for this package fall within designated Severe Winter Range for elk. As a condition of approval, the BLM may preclude development activities for up to 60 days from December 1 through April 30. Local weather conditions will dictate whether this condition is in effect or not. It is the responsibility of Evergreen to contact the BLM to determine whether this condition is in effect prior to initiating surface disturbing activities.

20. A current raptor survey must be obtained from the BLM for these wells if construction and completion activities for this well package are scheduled between August 15 and February 1. It is the responsibility of Evergreen to contact the BLM to obtain a current survey.

21. A locked gate shall be installed at the point of new road construction for the proposed road into wells 1C-24, 7C-24, 16C-24 and 2C-13 in such a manner/location as to effectively preclude motor vehicle access to avoid disturbance to big game. Installation may include fence extensions from the gate if necessary to effectively preclude access.

22. A second locked gate shall be installed near at or before the crossing of Evacuation Creek that accesses wells 4C-1, 2C-1 and 12C-12 meeting the above specifications to effectively preclude access.

23. A third locked gate shall be installed on the access road going to well 10C-12 at or before the crossing of Evacuation Creek in a manner to effectively preclude motor vehicle access.

24. Production of wells will be established prior to pipeline construction.

25. No off road use will be permitted outside of identified road corridors. Any new unneeded routes created during construction and/or layout of roads and well pads shall be closed and rehabilitated.

26. All trees removed in the process of construction shall be purchased from the Bureau of Land Management. The trees shall be cut with a maximum stump height of six inches and disposed of by one of the following methods:

a. Trees must be cut before being dozed off the area of disturbance. Trees shall be cut into four-foot lengths, down to four inches in diameter and placed along the edge of the disturbance. If the products are left for collection by the general public, they should be piled along the road side or pad to facilitate removal. The branches and tops should be lopped and scattered to a depth of 24 inches or less.

b. Purchased trees may be removed from federal land for resale or private use. Limbs may be scattered off the area of disturbance but not dozed off. Cut trees and have them removed for firewood, posts, or other products. The branches and tops should be lopped and scattered to a depth of 24 inches or less.

c. Chipped and scattered. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12" in diameter and 15' tall

as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This would effectively breakdown the woody fuel and scatters the debris thereby eliminating any hazardous fuel load adjacent to the new road and/or well pad.

27. For 4C-1-4S-104 well pad, access road and well tie pipeline, 10C-12-4S-104 well pad, access road and well tie pipeline, 12C-12-4S-104 well pad, access road and well tie pipeline, 2C-13-4S-104 well pad, access road and well tie pipeline, 1C-23-4S-104 well pad, access road and well tie pipeline, 2C-1-4S-104 well pad, access road and well tie pipeline, and 16C-24-4S-104 Well pad, access and well tie pipeline : All exposed rock outcrops in the proposed area must be inventoried by an approved paleontologist with a report detailing the results of the inventory and detailed mitigation recommendations, if appropriate, submitted to the BLM prior to the initiation of construction. If at any time it becomes necessary to excavate into the underlying bedrock formation to construct the road, level the well pad, construct the reserve/blooe pit or bury the well tie pipeline a paleontological monitor shall be present for such excavations.

28. 13C-14-4S-104 well pad: If at any time it becomes necessary to excavate into the underlying bedrock formation to construct the road, level the well pad, construct the reserve/blooe pit or bury the well tie pipeline a paleontological monitor shall be present for such excavations.

29. A cattleguard to BLM specifications is to be installed at the fence crossing in the mouth of Davis Canyon

30. Applicant is responsible for locating and co-coordinating with existing right-of-way holders. Colorado One Call procedure must be activated before trenching or other earthwork is begun.

31. Install low profile production equipment and paint all production facilities Juniper Green to blend with and mimic the surrounding vegetation.

COMPLIANCE/MONITORING: To be performed by BLM during and after drilling of the well

NAME OF PREPARER: Vern Rholl

NAME OF ENVIRONMENTAL COORDINATOR: *Caroline P. Hollowed 10/7/04*

SIGNATURE OF AUTHORIZED OFFICIAL: *Therese E. Walther*
Field Manager

DATE SIGNED: *10/07/04*

ATTACHMENTS: Location map of the proposed action.

Location of Proposed Action CO-110-2004-183-EA

